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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 1771

In re Patent Application of)
Junichi HAYAKAWA et al.)
Serial No. 09/890,863)
Filed: August 7, 2001)
For: WOVEN FABRIC FOR LOUD-)
SPEAKER DIAPHRAGM, DIAPHRAGM)
FOR LOUD-SPEAKER AND LOUD-)
SPEAKER	`

Examiner: J. Befumo

I hereby certify that this correspondence is being deposited with The United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on 11.24.03

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.99, Applicant submits herewith a Form PTO-1449 listing references known to Applicant and requests that these references be made of record in the above identified application. Copies of the references listed are submitted herewith in accordance with 37 C.F.R. 1.98(a).

In accordance with 37 C.F.R. § 1.97(e), it is certified that either (1) each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement, or (2) no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign patent application and no item of information contained in the information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this information disclosure statement.

JP 10-257587 describes a speaker diaphragm using the PBO fiber as shown in the English abstract. Furthermore, it also describes a use of woven or non-woven fabric (see paragraph [0015]) and the glass fiber or carbon fiber (see paragraph [0016]). This reference,

Docket No. 0670-0264 Application Serial No. 09/890,863

however, only discloses a speaker diaphragm comprising the FRP which is fabricated by applying a resin to the single fiber, and does not teach or suggest the feature of the present invention, that a "core of the thread is covered with other fibers such that the constitution of the thread is similar to the core yarn or covered yarn."

JP 02-057096 describes a diaphragm using the material such as the carbon fiber and polyester fiber, as shown in page 2, upper right column, line 5. This reference, however, teaches a woven fabric for a speaker diaphragm, which is woven with a thread made of fibers of a plurality of kinds, but the constitution of the thread of the present invention is different from that of JP 02-057096 because the surface of core of the thread of the '096 reference is completely covered with other fibers.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280. A duplicate copy of this sheet is attached.

Respectfully submitted,

Eric J. Robinson

Reg. No. 38,285

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	Examiner Name	J. Befumo	4 8 0
Sheet 1 of 1	Attorney Docket Number	0670-264	

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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